

ABSTRACT

After a slurry containing powdered silicon and a resin  
used as a carbon source is applied by impregnation to a  
5 carbon powder-made porous structural body having a bone  
structure, which is formed from powdered carbon, and is  
then carbonized at 900 to 1,300°C in a vacuum or an inert  
gas atmosphere, reaction sintering is performed at a  
temperature of 1,300°C or more in a vacuum or an inert gas  
10 atmosphere. Accordingly, since a carbonized porous  
structural body can be obtained which has open pores  
generated by a volume-reduction reaction at the same time  
when porous silicon carbide having a good wettability to  
molten silicon is formed, this carbonized porous  
15 structural body is impregnated with molten silicon at a  
temperature of 1,300 to 1,800°C in a vacuum or an inert  
gas atmosphere.